

AMENDMENTS TO THE CLAIMS

1.-6. (Canceled)

7. (Previously presented) A method of determining an appropriate channel for a wireless device in a wireless network, the method comprising:

detecting a potentially interfering signal on a frequency channel over the wireless network;

retrieving data from the interfering signal to retrieve protocol identification information; and

prior to determining whether to transmit over the frequency channel, determining whether the identified protocol of the interfering signal is a predetermined protocol, wherein the potentially interfering signal is compared to a threshold power level, the threshold power level being a function of the protocol used by the potentially interfering signal.

8. (Original) The method of claim 7 wherein the threshold power level is a higher power threshold if the protocol used by the potentially interfering signal is a protocol sharing predetermined functionalities with the wireless device.

9. (Original) The method of claim 8 wherein the wireless device transmits over the channel if the power level of the potentially interfering signal is below the threshold power level, wherein the transmitting of the wireless device is at a boosted power level to increase signal to noise levels of the wireless network.

10. (Original) The method of claim 8 wherein the wireless device transmits over the channel if the power level of the potentially interfering signal is below the threshold power level, wherein the transmitting of the wireless device is at a lowered power level to decrease power used by the wireless device.

11. (Original) The method of claim 7 wherein the threshold power level is a lower power threshold if the protocol used by the interfering signal is not a protocol sharing predetermined functionalities with the wireless device.

12. (Canceled)

13. (Previously presented) The method of claim 7 wherein the protocol of the potentially interfering signal is identified in a database prior to determining a threshold power level with which the wireless device could transmit on the frequency channel and wherein the threshold power level is a function of the identified protocol.

14. (Original) The method of claim 13 wherein the wireless device transmits on the frequency channel if the potentially interfering signal is below the threshold power level.

15.-21. (Canceled)

22. (Currently amended) A tangible computer readable medium encoded with computer-readable instructions for performing acts for determining an appropriate channel for a wireless device in a wireless network, the acts comprising:

detecting a potentially interfering signal on a frequency channel over the wireless network;

retrieving data from the potentially interfering signal to retrieve protocol identification information; and

prior to determining whether to transmit over the frequency channel, determining whether the identified protocol of the potentially interfering signal is a predetermined protocol, wherein the potentially interfering signal is compared to a threshold power level, the threshold power level being a function of the protocol used by the potentially interfering signal.

23. (Original) The computer readable medium of claim 22 wherein the threshold power level is a higher power threshold if the protocol used by the interfering signal is a protocol sharing predetermined functionalities with the wireless device.

24. (Original) The computer readable medium of claim 22 wherein the threshold power level is a lower power threshold if the protocol used by the potentially interfering signal is not a protocol sharing predetermined functionalities with the wireless device.

25. (Canceled)

26. (Previously presented) The computer readable medium of claim 22 wherein the protocol of the potentially interfering signal is identified in a database prior to determining a threshold power level with which the wireless device could transmit on the frequency channel and wherein the threshold power level is a function of the identified protocol.

27. (Original) The computer readable medium of claim 26 wherein the wireless device transmits on the frequency channel if the interfering signal is below the threshold power level.

28.-34. (Canceled)

35. (Currently amended) A computer system comprising:
a processor; and
a memory coupled to the processor, the memory including one or more program modules configured to determine an appropriate channel for communication over a wireless network by detecting a potentially interfering signal on a frequency channel, the program modules including at least:

a ~~receiver~~ first program module configured to retrieve data from the interfering signal to identify protocol identification information; and

a ~~protocol determination~~ second program module configured to determine whether the identified protocol of the potentially interfering signal is a predetermined protocol, the ~~determination~~ second program module operable prior to a determination of whether to transmit over the frequency channel, wherein the potentially interfering signal is compared to a threshold power level, the threshold power level being a function of the protocol used by the potentially interfering signal.

36. (Original) The computer system of claim 35 wherein the threshold power level is a higher power threshold if the protocol used by the potentially interfering signal is a protocol sharing predetermined functionalities with the computer system or a wireless device coupled to the computer system.

37. (Currently amended) The computer system of claim 36, further comprising:
a ~~transmitter~~ third program module configured to transmit over the channel if the power level of the potentially interfering signal is below the threshold power level, wherein the transmission is at a boosted power level to increase signal to noise levels of the wireless network.

38. (Currently amended) The computer system of claim 36 further comprising:
a ~~transmitter~~ third program module configured to transmit over the channel if the power level of the potentially interfering signal is below the threshold power level, wherein the transmission is at a lowered power level to decrease power used by the computer system.

39. (Original) The computer system of claim 35 wherein the threshold power level is a lower power threshold if the protocol used by the interfering signal is not a protocol sharing predetermined functionalities with the computer system or a wireless device coupled to the computer system.

40. (Canceled)

41. (Previously presented) The computer system of claim 35 further comprising a database configured to hold a plurality of protocols, wherein the protocol of the potentially interfering signal is checked against the plurality of protocols to determine a threshold power level with which to transmit on the frequency channel and wherein the threshold power level is a function of the identified protocol.

42.-52. (Canceled)